

LARIN, M.N., prof., doktor tekhn. nauk; MASLOV, A.A., kand. tekhn. nauk

Wear of a hard alloy and quenched steel, rubbing together. Izv. vys. ucheb. zav.; mashinostr. no.9:107-114 '58. (MIRA 12:10)

1. Moskovskiy tekhnologicheskiy institut pishchevoy promyshlennosti.  
(Mechanical wear) (Metal cutting)

25(7)

PHASE I BOOK EXPLOITATION

SOV/2969

Moscow. Vsesoyuznyy nauchno-issledovatel'skiy instrumental'nyy institut

Vysokoproizvoditel'nyye konstruktsii reztsov i ikh ratsional'naya ekspluatatsiya (High-productivity Single-point Tools and Their Efficient Use) Moscow, Mashgiz, 1959. 239 p. Errata slip inserted. 5,500 copies printed.

Ed.: M. N. Larin, Doctor of Technical Sciences, Professor; Tech. Ed.: A. F. Uvarova; Managing Ed. for Literature on Metalworking and Tool Making: R. D. Beyzel'man.

PURPOSE: This book is intended for engineers, technicians, technical-inspection personnel, and turners.

COVERAGE: This book deals with the efficient use of single-point cutting tools. Designs of single-point tools developed by industrial innovators and scientific research organizations, contemporary designing methods, and constructional analyses of

Card 1/6

LARIN, M.N., prof., doktor tekhn.nauk; MASLOV, A.A., kand.tekhn.nauk;  
KOGAN, A.B., assistent

Selecting the brand of hard alloys for machining highly  
hardened steels. Izv.vys.ucheb.zav.; mashinostr. no.1:  
114-122 '59. (MIRA 13:3)

1. Tekhnologicheskiy institut pishchevoy promyshlennosti.  
(Metal cutting)

MARKHASIN, Emmanuil L'vovich, kand.tekhn.nauk [deceased]; PETROSYANTS,  
Anatoliy Aramoisovich, kand.tekhn.nauk; LARIN, M.N., prof.,  
doktor tekhn.nauk, retsenzent; LESNICHENKO, I.I., inzh., red.;  
CHERNOVA, Z.I., tekhn.red.

[Milling bodies of revolution] Frezerovanie tel vrashchaniia.  
Moskva, Gos.nauchno-tekhn.izd-vo mashinostroit.lit-ry, 1960.  
109 p.  
(Metal cutting) (Milling machines)

GORETSKAYA, Zinaida Dmitriyevna, inzh.; LARIN, M.N., doktor tekhn.nauk,  
retsenzent; FEL'DSHTEYN, E.I., doktor tekhn.nauk, red.; CHERNOVA,  
Z.I., tekhn.red.

[Broaching with large feed] Protiagivanie s bol'shimi podachami.  
Moskva, Gos.nauchno-tekhn.izd-vo mashinostroit.lit-ry, 1960.  
203 p. (MIRA 13:9)

(Broaching machines)

LARIN, M. N.

PHASE I BOOK EXPLOITATION

SOV/5059

Moscow. Vsesoyuznyy nauchno-issledovatel'skiy instrumental'nyy institut

Vysokoproizvoditel'nyye konstruktsii protyazhek i ikh ratsional'naya ekspluatatsiya (Highly Productive Broach Constructions and Their Efficient Operation) Moscow, Mashgiz, 1960. 119 p. Errata slip inserted. 4,800 copies printed.

Ed. (Title page): M. N. Larin, Doctor of Technical Sciences, Professor; Tech. Ed.: G. Ye. Sorokina; Managing Ed. for Literature on Metalworking and Machine-Tool Making: V. I. Mitin, Engineer.

PURPOSE: This book is intended for engineers and technicians concerned with the design and use of broaches.

COVERAGE: The book deals with requirements for achieving high labor efficiency through the proper use of broaches. In this connection the following main topics are discussed: 1) modern designs of broaches for efficient methods of broaching; 2) selection of broaching regimes to ensure desired surface finish and accuracy

Card 1/8

## Highly Productive Broach Constructions (Cont.)

SOV/5059

of broached part; 3) data on plant standards for wear and scrapping of broaches; and 4) data on reconditioning of broaches, etc. The sharpening and heat treatment of broaches, and the measurement of their geometric parameters are also discussed. The causes of abnormal functioning of broaches and measures for their correction are reviewed on the basis of experience gained by leading Soviet and non-Soviet factories. Problems in organizing the inspection of the broaching operation are also considered. The work on which this book is based was carried out in the laboratory for metal cutting of the Vsesoyuznyy nauchno-issledovatel'skiy instrumental'nyy institut (VNII) (All-Union Instrument Scientific Research Institute) in cooperation with other institutions and advanced plants (NIITavtoprom [Technological Scientific Research Institute of the Automobile Industry], ChTZ [Chelyabinsk Tractor Plant], ZIL [Plant imeni Likhachev], and others). The chapters were written as follows: Chapters I and IV, by M. N. Larin, Professor, and M. P. Tsyganova, Engineer; Ch. II, by M. Yu. Lapinskiy, Engineer, and P. G. Katsev, Candidate of Technical Sciences; Ch. III, by L. K. Petrosyan,

Card 2/8

**Highly Productive Broach Constructions (Cont.)**

SOV/5059

Candidate of Technical Sciences, and L. G. Dibner, Engineer; and  
Ch. V, by A. D. Martynov, Candidate of Technical Sciences. There  
are 36 references, all Soviet.

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## Highly Productive Broach Constructions (Cont.)

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**Highly Productive Broach Constructions (Cont.)**      SOV/5059

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Card 6/8

LARIN, M.N., doktor tekhn.nauk, prof.; TSYGANNOVA, M.P., inzh.; TAMBOVTSSEV, S.S., kand. tekhn. nauk; MITYAKOV, A.V., inzh.; PETROSYAN, L.K., kand. tekhn. nauk; CHERNOUSENKO, A.P., inzh.; BUDNIKOV, N.Ye., inzh.; MARTYNOV, A.D., kand. tekhn. nauk; IVANOVA, N.A., red. izd-va; GORDEYEVA, L.P., tekhn. red.

[High-production designs of form cutters and their efficient use] Vy-sokoproizvoditel'nye konstruktsii fasonnykh frez i ikh ratsional'naia ekspluatatsiia. Pod red. M.N.Larina. Moskva, Mashgiz, 1961. 174 p. (MIRA 14:12)

1. Moscow. Vsesoyuznyy nauchno-issledovatel'skiy instrumental'nyy institut. 2. Vsesoyuznyy nauchno-issledovatel'skiy instrumental'nyy institut, Moscow (for all except Ivanova, Gordeyeva)  
(Metal-cutting tools)

LARIN, M.N., doktor tekhn.nauk, prof.

Methods of industrial tests of metal-cutting tools. Vest.mash. 41  
no.7:66-69 J1 '61. (MIRA 14:6)  
(Metal-cutting tools--Testing)

ZOREV, N.N., doktor tekhn. nauk, prof.; KREYMER, G.S., kand. tekhn. nauk; LARIN, M.N., doktor tekhn. nauk, prof., retsenzent; LESNICHENKO, I.I., red. izd-va; GORDEYEVA, L.P., tekhn. red.

[High-speed machining of steel with hard-alloy cutting tools under intermittent cutting conditions] Vysokoproizvoditel'naja obrabotka stali tverdosplavnymi reztsami pri preryvistom rezanii. Moskva, Gos. nauchno-tekhn. izd-vo mashinostroit. lit-ry, 1961. 78 p.  
(Metal cutting)

(MIRA 14:5)

LARIN, M., mekhanik

Hydraulic shears. Stroitel' no.4:25 Ap '61.  
(Metal-cutting tools)

(MIRA 14:5)

REZNIKOV, A.N., prof., doktor tekhn. nauk; LARIN, M.N., doktor tekhn. nauk, prof., retsenzent; FRID, L.I., red.izd-va; DEMKINA, N.F., tekhn. red.

[Heat exchange in metal cutting and the cooling of cutting tools] Teploobmen pri rezanii i okhlazhdenie i instrumentov. (MIRA 17:2) Moskva, Mashgiz, 1963. 199 p.

ARKHIPOV, Vladimir Vasilevich, dots; KASENKOVA, Mihail  
Aleksandrovich, dots., kand. tekhn. nauk; LARIN, Moisey  
Nikonovich, prof., doktor tekhn. nauk; SOKOLOV, Nikolay  
Vasil'yevich, prof. [deceased]; SHEVCHENKO, Gennadiy  
Dmitriyevich, dots., kand. tekhn. nauk; SHUKHOV, Yuriy  
Vladimirovich, dots., kand. tekhn. nauk; SHCHERBAKOV, G.S.,  
red.

[Technology of metals] Tekhnologija metallov. [By] V.V.  
Arkhipov i dr. Izd. 2., perer. Moskva, Vysshajaia shkola,  
1964. 563 p. (MIRA 17:10)

ACC NR: AP6028722

SOURCE CODE: UR/0122/66/000/000/

AUTHORS: Larin, M. N. (Doctor of technical sciences, Professor); Martynov, G. A.  
(Engineer)

ORG: none

TITLE: Methods of heating parts during machining

SOURCE: Vestnik mashinostroyeniya, no. 8, 1966, 70-73

TOPIC TAGS: metal machining, hot machining, radiation heating, induction heating,  
metalworking

ABSTRACT: Various methods of locally heating the cutting region of a part during its machining are discussed qualitatively, with numerous references to literature and patents. The major part of the report is devoted to the origin, range of applications and various advantages and disadvantages of electric contact and induction heating geometries (shown graphically), although an optical (radiation) heating method (U.S. patent 2861166) is also briefly described. A comparison of the cost required by different methods to heat 1 cm<sup>2</sup> to a depth of 3 mm is tabulated as follows (in %): electric contact with roller electrode (industrial frequency) - 50; gas flame - 60; induction heating (500--10 000 cps) - 100; induction heating (100--1000 kcps) - 125; electric contact (100--1000 kcps) - 150. Orig. art. has: 2 figures and 1 table.

SUB CODE: 13/ SUBM DATE: none/ ORIG REF: 008/ OTH REF: 003

UDC: 621.941.016.2

Card 1/1

Reactions with aromatic ethers proposed by the Radzewicz method. Condensation of benzene with some unsaturated aliphatic halogen derivatives and polyphenol derivatives. B. N. Ulikov and N. A. Loria. J. Russ. Chem. USSR, 1910, 12, 400-407 [U.S. transl. 476-483; cf. preceding abstract].—In general, condensation with  $\text{AlCl}_3\text{-R}$  (Radzewicz catalyst) is the same as condensation with ordinary  $\text{AlCl}_3$ . The yields of the corresponding phenylated deriv. drop appreciably as the no. of halogen atoms in the respective halogen deriv. is increased. If the no. of halogen atoms in the mol. of the halogen deriv. remain the same, the yield of phenylated products rises somewhat when a Me side-group is present. In general, condensation of tri- and tetra-halogen deriv. with  $\text{C}_6\text{H}_6$  is accompanied by cracking and only the mono- and di-phenyl deriv. are synthesized in the presence of  $\text{AlCl}_3\text{-R}$ . Condensations are combined with isomerizations. Unsaturated monohalogen deriv. also yield diphenylated products — the result of the addition of HCl at the double linking. Halogen atoms at the double linking practically do not react in the presence of  $\text{AlCl}_3\text{-R}$ .

In the condensation of  $(\text{CH}_3\text{Cl})_2$  with  $\text{C}_6\text{H}_6$ , the optimum % of Al is 2 [yield 25.2% of  $(\text{CH}_3\text{Ph})_2$ , and 10.1% of tar]. Increasing the % of Al diminishes the yield of  $(\text{CH}_3\text{Ph})_2$ , although the % of tar continues to rise. The yield of  $(\text{CH}_3\text{Ph})_2$  rises and that of tar diminishes as the proportion of  $\text{C}_6\text{H}_6$  is increased. Between 16° and 20° temp. has no appreciable influence on the yield of  $(\text{CH}_3\text{Ph})_2$ , but increases somewhat the yield of tar. The optimum time of contact is 24 hr.; longer storage promotes the formation of tar. The products isolated are  $(\text{CH}_3\text{Ph})_2$ , m.p. 51.5-52°, and 1 : 1-diphenylethane, b.p. 272-278°, d<sub>4</sub><sup>20</sup> 1.0048, n<sub>D</sub><sup>20</sup> 1.57428. Similar results are given by  $(\text{CH}_3\text{Br})_2$ . Condensing  $\text{C}_6\text{H}_6$  with  $\text{Br}\text{eBr}$  (4 : 1) with 2% of Al, at room temp., and with storage for 28 hr. gives a little

X

unchanged halide, a mixture of PhBr<sup>1</sup> and PhBr<sup>2</sup> shown by bromination in direct sunlight to contain 80% of PhBr<sup>1</sup>, and (mainly, as much as 45%) 1 : 2-diphenyl-2-methylpropane (II), b.p. 284–285°, d<sub>4</sub><sup>20</sup> 0.9815, n<sub>D</sub><sup>20</sup> 1.61200, m.p. 135–136° [containing a small proportion of 2 : 3-diphenylbutane (III), m.p. 125°], identified by oxidation to COPh<sub>2</sub> (memicarboxylic, m.p. 160–200°). When left in contact with AlCl<sub>3</sub>-R in C<sub>6</sub>H<sub>6</sub> for 20 hr. at 18–19°, I furnishes PhBr<sup>1</sup>, unchanged initial material, II, and a modification, m.p. 8–10° of II. Condensing 3-chloro-2-methylprop-1-ene with C<sub>6</sub>H<sub>6</sub> under optimum conditions gives PhBr, shown by bromination according to Schramm to contain 80% of PhBr<sup>1</sup>, II, and I. Under similar conditions, CH<sub>3</sub>CH<sub>2</sub>CH<sub>2</sub>Cl affords PhPr, b.p. 148–150°, d<sub>4</sub><sup>20</sup> 0.9880, n<sub>D</sub><sup>20</sup> 1.49381, and a fluorescent diphenylpropane, b.p. 270–281°, d<sub>4</sub><sup>20</sup> 0.9804, n<sub>D</sub><sup>20</sup> 1.53863. Condensing CH<sub>2</sub>(CH<sub>2</sub>Br)<sub>2</sub> with C<sub>6</sub>H<sub>6</sub> (1 : 6) furnishes a colorless diphenylpropane, b.p. 285°, d<sub>4</sub><sup>20</sup> 1.0202, n<sub>D</sub><sup>20</sup> 1.47904. CMeBr(CH<sub>2</sub>Br)<sub>2</sub> and C<sub>6</sub>H<sub>6</sub> (1 : 6) give unreacted bromide, a large proportion of II, and a thick, dark tar. II is also obtained when C<sub>6</sub>H<sub>6</sub> is condensed with 3-chloro-1 : 2-dibromo-2-methylpropane. Condensing (CHCl<sub>3</sub>)<sub>2</sub> with C<sub>6</sub>H<sub>6</sub> (1 : 6) at 20° for 20 hr. furnishes anthracene, m.p. 300–309.5°, but if condensation is effected at 70–75° with 8% of Al the product is (CH<sub>3</sub>Ph)<sub>2</sub>. No reaction occurs between C<sub>6</sub>H<sub>6</sub> and C<sub>6</sub>H<sub>6</sub> (1 : 6) in the presence of 2, 4, 6, 8, or 10% of Al and at 70–70°. H. WAXN.

YEZRIVYELEV, I.M.; LARIN, N.A.; NEYMARK, O.M.; TOLSTIKOVA, Z.D.

Synthesis of p-divinylbenzene. Zhur. ob. khim. 26 no.2:589-591  
F '56. (MLRA 9:8)

1. Nauchno-issledovatel'skiy institut polimerizatsionnykh  
plastmass.  
(Benzene)

YEZRIYEV, I.M.; LARIN, N.A.

Synthesis of carbazole-N-propenoxide. Zhur. ob. khim. 26 no.3:  
791-793 Mr '56. (MLRA 9:8)

I. Leningradskiy nauchno-issledovatel'skiy institut polimerizatsion-  
nykh plastmass. (Carbazole)

"APPROVED FOR RELEASE: 08/31/2001

CIA-RDP86-00513R000928630013-9

Synthesis of *N*(2,3-epoxypropyl)carbazole  
Barilev and N. A. Larin. J. Russ. Chem. U.S.S.R. 26,  
905-6(1955)(English translation). See C.A. 53, 147104.  
B.M.R.

Chem 2  
PM

APPROVED FOR RELEASE: 08/31/2001

CIA-RDP86-00513R000928630013-9"

LARIN, N.A.; MATVEYEVA, Ye.N.; SMIRNOVA, V.S.

Synthesis of some 2-hydroxy-4-alkoxybenzophenones. Zhur.  
khim. 30 no.7:2377-2379 J1 '60. (MIRA 13:7)

1. Nauchno-issledovatel'skiy institut polimenizatsionnykh  
plastmass. (Benzophenone)

LARIN, N.A.; MATVEYEVA, Ye.N.; KAZHUTKINA, L.V.

Synthesis of certain 2-hydroxy-4-alkoxybenzophenones.  
Zhur. ob. khim. 32 no.2:367-369 F '62. (MIRA 15:2)  
(Benzophenone)

LARIN, N.A.; MATVEYEVA, Ye.N.; PETROVA, T.G.

Synthesis of some 2-hydroxy-5-alkoxybenzophenones. Zhur.  
(MIRA 17:6)  
ob. khim. 34 no. 3:864-866 Mr '64.

L 24705-66 EWT(m)/EWP(j) IJP(c) RM

ACC NR: AP6009534 (A) SOURCE CODE: UR/0413/66/000/005/0069/0069

INVENTOR: Kirilova, E. I.; Glagoleva, Yu. A.; Larin, N. A.;  
Matveyeva, Ye. N.; Lebedeva, Ye. Ya.; Smirnova, V. S.

27  
B.

ORG: none

TITLE: Method for photostabilization of polystyrene. Class 39,  
No. 179467 announced by the State Scientific Research Institute of  
Polymerized Plastics and Experimental Plant (Gosudarstvennyy nauchno-  
issledovatel'skiy institut polimerizatsionnykh plastmass i eksperi-  
mentalnyy zavod)

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 5,  
1966, 69

TOPIC TAGS: polystyrene, light stabilization, photostabilization,  
light stabilizer.

ABSTRACT: An Author Certificate has been issued describing a method of  
light stabilization of polystyrene by introducing a light stabilizer  
into it. To extend the variety of light stabilizers, 2-hydroxy-4-v-  
butoxy-4'-chlorobenzophenone is suggested for use as the light  
stabilizer. [NT]

SUB CODE: 11/  
Card 1/1 F(1)

SUBM DATE: 10Jun64/  
UDC: 678.048.5:746.22

L 0647-67 EWP(1)/EWT(m) IJP(c) RM  
 ACC NR: AR6028232 (A)

SOURCE CODE: UR/0081/66/000/009/H043/H043

AUTHOR: Larin, N. A.; Petrova, T. G.TITLE: Synthesis of certain light stabilizers from the class of benzophenone and trihydroxybutyrophenone derivatives28  
13

SOURCE: Ref. zh. Khimiya, Part I, Abs. 9Zh169

REF SOURCE: Sb. Sintez i issled. effektivn. stabilizatorov dlya polimern. materialov. Voronezh, 1964, 206-211

TOPIC TAGS: light absorption, stabilizer additive, UV absorption, ketone

ABSTRACT: In a search for light stabilizers for polymers (e. g., polyolefins), the Friedel-Crafts reaction was used to synthesize 2,4-(OH)<sub>2</sub>C<sub>6</sub>H<sub>3</sub>C(O)Ph (I), 2,5-(OH)2,5-(OH)<sub>2</sub>C<sub>6</sub>H<sub>3</sub>C(O)Ph (II), 3,4-(OH)<sub>2</sub>C<sub>6</sub>H<sub>3</sub>C(O)Ph (III), 2,2',4,4'-tetrahydroxybenzophenone and also 3,4,5,2',4'- and 3,4,5,2',5'-pentahydroxybenzophenones, which, with the exception of II and III, proved to be good absorbers of UV light,<sup>15</sup> but mixed poorly with the polymers. Reaction of alkaline solutions of I and II with alkyl halides produced the corresponding 2-OH-4-OR-C<sub>6</sub>H<sub>3</sub>C(O)Ph [IV, where R are n-alkyls from C<sub>1</sub> to C<sub>10</sub>, iso-PrO, iso-BuO, sec-BuO, CH<sub>2</sub>CH(Et)Bu, CH(Me)C<sub>6</sub>H<sub>13</sub> and CH<sub>2</sub>CHCH<sub>2</sub>O] and 2-OH-5-ORC<sub>6</sub>H<sub>3</sub>C(O)Ph (R=Me, iso-Pr, Bu, C<sub>8</sub>H<sub>17</sub>). In addition, 2-OH-4-MeC<sub>6</sub>H<sub>3</sub>C(O)Ph, 4-OH-2-MeC<sub>6</sub>H<sub>3</sub>C(O)Ph, 2-OH-5-RC<sub>6</sub>H<sub>3</sub>C(O)Ph (R=Et, tert-Bu, iso-C<sub>8</sub>H<sub>17</sub>), and also 2,3,4-(OH)<sub>3</sub>C<sub>6</sub>H<sub>2</sub>C(O)Pr and 2,4,6-(OH)<sub>3</sub>C<sub>6</sub>H<sub>2</sub>C(O)Pr were obtained. The best stabilizers are

Card 1/2

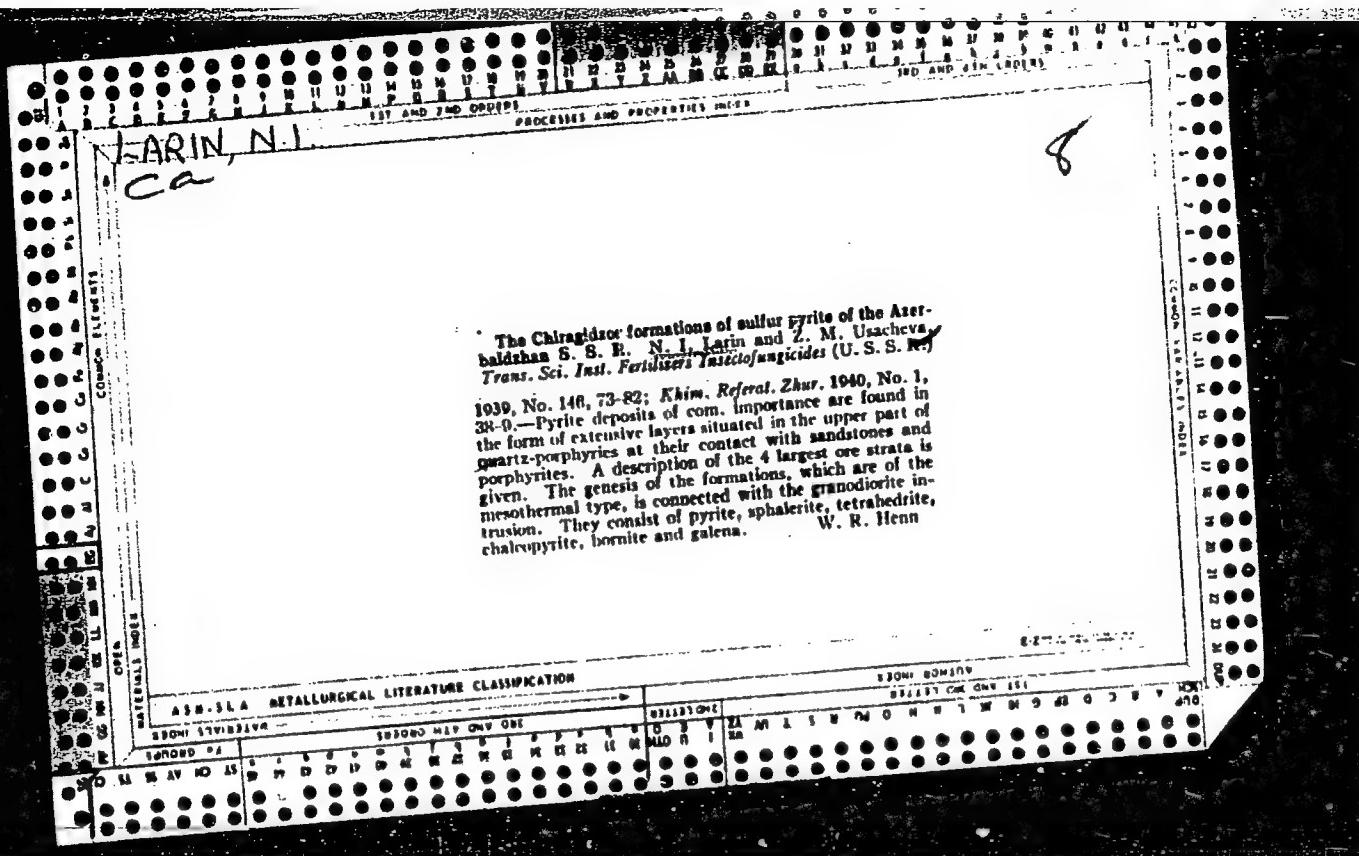
L 06477-67

ACC NR: AR6028232

IV; in all the other cases the absorption maximum of the UV portion of the spectrum is  
displaced toward short waves. A. Shipov. [Translation of abstract]

SUB CODE: 07

Card 2/2 mLE



ANIKEYEV, N.P.; BISKE, S.F.; VERESHCHAGIN, V.N.; ZIMKIN, A.V.; LARIN, N.I.

Interdepartmental conference on the preparation of unified  
stratigraphic plans of the northeastern part of the U.S.S.R.  
Sov. geol. no.62:182-188 '57. (MIRA 11:6)

1. Severo-Vostochnoye geologicheskoye upravleniye Ministerstva  
geologii i okhrany nedor SSSR i Vsesoyuznyy nauchno-issledovatel'skiy  
geologicheskiy institut.  
(Siberia, Eastern-Geology, Stratigraphic)

LARIN, N. I.

ANIKEYEV, N.P., glavnnyy red.; BISKE, S.F., red.; BOBYLEVSKIY, V.I., red.:  
VAS'KOVSKIY, A.P., red.; VERESHCHAGIN, V.N., red.; DRABKIN, I.Ye.,  
red.; YEVSEGULOV, B.B., red.; YEFIMOVA, A.F., red.; ZIMKIN, A.V.,  
red.; LARIN, N.I., red.; LIKHAREV, B.K., red.; MENSER, V.V., red.;  
MIKHAYLOV, A.F., red.; NIKOLAYEV, A.A., red.; POPOV, G.G., red.;  
POPOV, Yu.N., red.; SAKS, V.N., red.; SEMEYKIN, A.I., red.;  
SIMAKOV, A.S., red.; TITOV, V.A., red.; SHILQ, N.A., red.; EL'YANOV,  
M.D., red.; LAKUSHEV, I.R., red.: V redaktsirovaniye printimali uchast-  
tiye: ANDREYEVA, O.N., red.; BAYKOVSKAYA, T.N., red.; BOLKHOVITINA,  
N.A., red.; BORSUK, M.O., red.; VASIL'YEV, I.V., red.; VASILEVSKAYA,  
N.D., red.; VOLEVODOVA, Ye.M., red.; YEVSEYEV, K.P., red.; KIPARI-  
SOVA, L.D., red.; KRASNYY, L.I., red.; KRISHTOFOVICH, L.V., red.;  
KULIKOV, M.V., red.; LIBROVICH, L.S., red.; MARKOV, F.G., red.;  
MODZALEVSKAYA, Ye.A., red.; NIKIFOROVA, O.I., red.; OBUT, A.M.,  
red.; PCHELINTSEVA, G.T., red.; RZHONSNITSKAYA, M.A., red.; SEDOVA,  
M.A., red.; STEPANOV, D.L., red.; TIMOFEEV, B.V., red.; KHUDOLEY,  
K.M., red.; CHEMEKOV, Yu.F., red.; CHERNYSHEVA, N.Ye., red.;  
DERZHAVINA, N.G., red. izd.-va; GUROVA, O.A., tekhn.red.

(Continued on next card)

ANIKEEV, N.P.—(continued) Card 2.

[Decisions of the Interdepartmental Conference on the Unified Stratigraphic Columns of the Northeastern Part of the U.S.S.R.]  
Resheniya Mezhdromstvennogo soveshchaniia po razrabotke unifitsirovannykh stratigraficheskikh skhem dlia Severo-Vostoka SSSR.  
Moskva, Gos.nauchno-tehn.izd-vo lit-ry po geol. i okhrane nedor,  
1959. 65 p.

(MIRA 13:2)

1. Mezhdromstvennoye soveshchaniye po razrabotke unifitsirovannykh stratigraficheskikh skhem dlya Severo-Vostoka SSSR, Magadan, 1957.  
(Soviet Far East--Geology, Stratigraphic)

KOVALEVA, Ya.B., assistent; LARIN, N.I., aspirant

Achieving prosthesis fixation by means of a suction-plate on the  
edentulous mandible. Stomatologija 39 no.1:62-64 Ja-F '60.

(MIRA 14:11)

1. Iz kafedry ortopedicheskoy stomatologii (zav. - prof. V.Yu.Kuryand-  
skiy) Moskovskogo meditsinskogo stomatologicheskogo instituta (dir. -  
dotsent G.N.Beletskiy).  
(DENTAL PROSTHESIS)

L 13508-69                    HDS  
ACCESSION NR: AP3003468

5/0078/63/008/007/1555/1558

51  
50

AUTHOR: Agafonov, I. L.; Devyat'ykh, G. G.; Larin, N. V.

TITLE: Mass-spectra of silicon tetrachloride

SOURCE: Zhurnal neorganicheskoy khimii, v. 8, no. 7, 1963, 1555-1558

TOPIC TAGS: mass-spectrum, silicon tetrachloride, 1305 mass-spectrometer

ABSTRACT: The authors wanted to get more complete mass-spectra of silicon tetrachloride inasmuch as this data is only partially described in existent literature. The mass-spectra were taken on a MI-1305 mass-spectrometer. This apparatus is shown in a sketch. The mass-spectra which were obtained are given in a table. Data obtained by the authors differs greatly with data obtained by Sokolov, Andrianov and Akinov (Zh. obshch. khimii, 25, 1955, 675). Authors show that computed ratios among various isotropic variations of the ions are in close agreement with experimental data. The small deviations have a uniform character. In all of the experimental cases examined, the ratio of the values, corresponding to the odd mass numbers, is larger and the ratio of the values, corresponding to the even mass numbers, to the values for odd masses is smaller. Orig. art. has: 3 tables and 1 figure.

Cord 1/2

Scientific-Research Inst. for Chemistry

AGAFONOV, I.L.; LARIN, N.V.

Cleavage of silicic acid esters under the effect of electronic  
impact. Zhur. ob. khim. 33 no.8:2626-2631 Ag '63.  
(MIRA 16:11)  
1. Gor'kovskiy gosudarstvennyy universitet.

LARIN, N. V.

The Second All-Union Conference on the Preparation and Analysis of High-Purity Elements, held on 24-28 December 1963 at Gorky State University im. N. I. Lobachevskiy, was sponsored by the Institute of Chemistry of the Gorky State University, the Physicochemical and Technological Department for Inorganic Materials of the Academy of Sciences USSR, and the Gorky Section of the All-Union Chemical Society im. D. I. Mendeleyev. Some 90 papers were presented, among them the following:

N. V. Larin, G. G. Devyatlykh, and I. L. Agafonov — a spectrochemical — and A. D. Zorin and A. M. Amel'chenko — a chromatographic control method of Si purification by determination of extraneous volatile hydrides in monosilane.

(Zhur Anal. Khim., 19, No. 6, 1964 (p. 777-79)

LARIN, N.V.; DEVYATYKH, G.G.; AGAFONOV, I.L.

Mass spectra of phosphine and arsine. Zhur.neorg.khim. 9 no.1:205-207  
Ja '64. (MIRA 17:2)

1. Gor'kovskiy gosudarstvennyy universitet imeni Lobachevskogo.

AGAFONOV, I.L.; DEVYATYKH, G.G.; FROLOV, I.A.; LARIN, N.V.

Mas spectrum of monogermane. Zhur. fiz. khim. 36 no. 6 1367-  
1368 Je'62 (MIRA 17 e7)

1. Gor'kovskiy universitet imeni Lobachevskogo.

AVAKYAN, Arshaluys Aramovich, prof.; LARIN, Nikolay Vasil'yevich,  
zhurnalist; NIKOLAYEV, V.R., red.

[In the depths of the microcosm] V glubiny mikromira. Mo-  
skva, Znanie, 1964. 31 p. (Novoe v zhizni, nauke, tekhn-  
ike. VIII Seriia: Biologija i meditsina, no.24)  
(MIRA 17:11)

LARIN, P.A.

Water permeability of frozen soils under various tillage practices.  
Pochvovedenie no.11:89-93 N '61. (MIRA 14:12)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut gidrotehniki i  
melioratsii. (Tillage) (Frozen ground)

LARIN, P.A.

Permeability of frozen soils in relation to their moisture content  
and fall ploughing. Meteor. i gidrol. no.9:40-44 S '62.  
(MIRA 15:8)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut gidrotehniki  
i melioratsii.  
(Saratov Province--Frozen ground) (Saratov Province--Soil moisture)

LARIN, P.A.

Air permeability of frozen soils as related to fall tillage and  
moisture. Pochvovedenie no.2:75-81 p '63. (MIRA 16:3)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut gidrotekhniki  
i melioratsii.  
(Soil aeration) (Frozen ground)

LARIN, P.F.

In the technical and economic committee of the Leningrad Economic Council. Biul.tekh.-ekon.inform.Gos.nauch.-issl.inst.nauch. i tekh.-inform. no.4:87-88 '62. (MIRA 15:7)  
(Leningrad Province—Economic councils)

KRADRASHKOV, A.V., dots.; LARIN, P.I., inzh.; PLEVNEV, A.K., aspirant;  
PLOTNIKOV, M.G., assistant; ROMANOVSKIY, V.A., assistant;  
SKOGOREEV, V.P., inzh.

Precision attained in standardizing Invar tapes on interference and optomechanical comparators of the Moscow Institute for Engineers in Geodesy, Aerial Photography, and Cartography.  
Trudy MIIGAIK no.36:63-66 '59. (MIRA 13:4)

1. Kafedra vysshoy geodezii Moskovskogo instituta inzhenerov  
geodezii, aerofotos"zemki i kartografii.  
(Measuring tapes--Standards)

L 48303-65

EM(1) G

S/0154/65/000/005/0037/0043

ACCESSION NR: AP5006668

AUTHOR: Larin, P. I. (Senior lecturer)

TITLE: Scientific research studies in a comparator

SOURCE: IVUZ. Geodeziya i aerofotos"yemka, no. 5, 1964, 37-43

TOPIC TAGS: comparator, invar wire, comparator length variation, length standard

ABSTRACT: The author reviews the following studies conducted in recent years at the Metrologicheskaya laboratoriya (Metrology Laboratory) of his Institute in an effort to improve the precision of calibration of invar wires: 1) an investigation of the causes of changes in the length of the Institute's comparator; 2) a determination of friction in the blocks of suspended measuring devices of the comparator; and 3) a determination of the precision of calibrating invar wires using the interferential and optical-mechanical comparators of the Institute. As a result of protracted continuous observations, the cause of the annual comparator-length variations of about  $350 \mu$  since 1940 was traced to the boilers of the central heating installed on the other side of the wall at a distance of a few meters from the comparator. By a simple, briefly outlined, technique, the mean friction value for the comparator blocks was found to be 15 g. Examination revealed that improper

Card 1/2

L 48303-65

ACCESSION NR: AP5006668

illumination of the comparator scales and micronotches was another source of error. A new illumination system installed in 1963 on the outermost microscopes of the comparators greatly increased the calibration precision, so that the convergence in length of standard invar wires has since become completely satisfactory. Orig. art. has: 8 tables.

ASSOCIATION: Moskovskiy institut inzhenerov geodesii, aerofotos"yemki i kartografii  
(Moscow Institute of Survey, Aerial Photography and Cartography Engineers)

SUBMITTED: 13Mar64

ENCL: 00

SUB CODE: ES

NO KEY SOV: 000

OTHER: 000

Card 2/2

LARIN, P.I., starshiy prepodavatel'

Stability of the lengths of working geodetic standards for the  
comparator of the Moscow Institute for Engineers in Geodesy,  
Aerial Photography, and Cartography. Trudy MIIGAIK no.50:  
57-64 '62. (MIRA 16:7)

1. Kafedra vysshey geodezii Moskovskogo instituta inzhenerov  
geodezii, aerofotosъемки i kartografii.  
(Chains—Testing)

KONDRASHKOV, A.V., dotsent, kand. tekhn. nauk; LARIN, P.I., starshiy  
prepodavatel'

MIIGAIk comparator for standardizing measuring tapes of 0.1.  
to 24 meters in length. Izv. vys. ucheb. zav.; geod. i aerof.  
no.3:131-137 '63. (MIRA 17:1)

1. Moskovskiy institut inzhenerov geodezii, aerofotos"yemki  
i kartografii.

38292

S/190/62/004/006/019/026  
B110/B138

15.8620

AUTHORS: Usmanov, Kh. U., Larin, P. P., Tashpulatov, Yu. T.,  
Musayev, U. N., Tillayev, R. S.

TITLE: The IR spectra of graft copolymers of polystyrene and  
perchlorovinyl with acrylonitrile, obtained under  $\gamma$ -radiation

PERIODICAL: Vysokomolekulyarnyye soyedineniya, v. 4, no. 6, 1962, 907-912

TEXT: The IR spectra were investigated for the graft copolymers of poly-styrene with acrylonitrile (PSA) and perchlorovinyl with acrylonitrile (PCA), obtained by  $\gamma$ -radiation. The graft copolymers were prepared according to the authors (Mezhdunarodnyy simpozium po makromolekulyarnoy khimii (International Symposium on Macromolecular Chemistry), Moskva, iun' 1960 g. sektsiya III, p. 270). The radiation dose was 1 - 10,000,000 roentgen. For spectral analysis KBr compacts were produced. A double-beam IR spectrophotometer type MKC-14 (IKS-14) was used with NaCl prism for 2.5 - 15  $\mu$ . Homopolymerization of acrylonitrile and graft copolymerization with polystyrene takes place during graft copolymerization. Since the spectrum of the graft copolymer differed from that of the initial

Card 1/3

S/190/62/004/006/019/026  
B110/B138

The IR spectra of graft...

polymer, grafting of polyacrylonitrile and polystyrene presumably occurred during irradiation. The graft copolymer of polystyrene with acrylonitrile corresponded to oscillations at:  $2.86 - 2.94\mu$  to hydrogen bond (N....H);  $3.28$  and  $3.32\mu$  = asymmetric oscillations of the  $\text{CH}_2$  group;  $3.43$  and  $3.52\mu$  = valency oscillations of the  $\text{CH}_2$  group;  $4.45\mu$  =  $\text{C}\equiv\text{N}$  valency oscillations;  $5.13$ ,  $5.31$  and  $5.53\mu$  = harmonics of the monosubstituted benzene ring;  $5.98\mu$  =  $\text{C}=\text{O}$  valency oscillations;  $6.24\mu$  = oscillations of the  $\text{C}=\text{C}$  bond of the benzene ring;  $6.69\mu$  = oscillation of the benzene ring;  $6.87$ ,  $7.09$ ,  $7.20\mu$  = deformation oscillations of the  $\text{CH}_2$  group;  $7.94\mu$  =  $\text{C}-\text{H}$  deformation oscillations;  $8.44$ ,  $8.66\mu$  = oscillations of the monosubstituted benzene ring;  $9.13$ ,  $9.34\mu$  =  $\text{C}-\text{C}$  skeleton oscillations;  $10.99$ ,  $11.80\mu$  =  $\text{CH}$  oscillations of the monosubstituted benzene;  $13.16$ ,  $14.28\mu$  = non-flat deformation oscillations of the  $\text{CH}$  group of the monosubstituted benzene ring. The insolubility of the copolymer ( $\text{C} = 73.77\%$ ,  $\text{H} = 6.81\%$ ,  $\text{N} = 13.47\%$ ,  $\text{O} = 5.95\%$ ) is explained by: (1) grafting, (2) appearance of new bonds ( $2.86 - 2.94\mu$ ; N....H hydrogen bond). For the graft copolymer of per-chlorovinyl and acrylonitrile there corresponded the bands:  $2.91\mu$  to NH valency oscillations in the  $\text{NH}_2$  group;  $3.39\mu$  =  $\text{C}-\text{H}$  deformation oscillations;

Card 2/3

S/190/62/004/006/019/026  
B110/B138

The IR spectra of graft...

5.81 $\mu$  = C=O valency oscillations; 7.03 $\mu$  = CH<sub>2</sub> deformation oscillations;  
7.37, 9.83 $\mu$  = C≡N valency oscillations; 10.39 $\mu$  = C-C skeleton oscillations;  
13.17 $\mu$  = C-Cl valency oscillations; 14.80 $\mu$  = C-H deformation oscillations.  
The appearance of the band at 2.91, 5.81, 7.37 and 9.83 $\mu$  presumably proves  
saponification of the C≡N to the O=C-NH<sub>2</sub> group owing to HCl separation and  
air humidity. For the graft copolymer of perchlorovinyl with acrylonitrile  
the following oscillations appear: 3.40 $\mu$  = CH<sub>2</sub> valency oscillations, 4.42 $\mu$   
= C≡N valency oscillations; 5.99 $\mu$  = C=O valency oscillations; 6.67, 6.87 $\mu$  ✓  
= CH<sub>2</sub> deformation oscillations; 7.19, 7.36, 7.94 and 8.36 $\mu$  = C-H deforma-  
tion oscillations; 9.13, 9.34 $\mu$  = -C-C-C- skeleton oscillations; 13.10 $\mu$   
= C-Cl valency oscillations. There are 2 figures.

ASSOCIATION: Institut khimii polimerov AN UzSSR (Institute of the Chemistry  
of Polymers AS UzSSR). Tashkentskiy gosudarstvennyy univer-  
sitet im. V. I. Lenina (Tashkent State University imeni  
V. I. Lenin)

SUBMITTED: April 14, 1961  
Card 3/3

L13672-63

BWP(j)/BPT(m)/BDS Pe-I RM

ACCESSION NR: AP3003525

S/0291/63/000/003/0057/0063 51

AUTHORS: Inoyatov, N. Sh.; Larin, P. P.; Aykhodzhayev, B. I.

56

TITLE: Reaction between polyvinyl alcohol and sulfur sesquichloride

SOURCE: Uzbekskiy khimicheskiy zhurnal, no. 3, 1963, 57-63

TOPIC TAGS: polyvinyl alcohol, sulfur sesquichloride, sulfur, polyvinyl, chlorine, hydroxyl, infrared analysis, absorption coefficient

ABSTRACT: Polyvinyl alcohol and sulfur sesquichloride were reacted at 110°C. Films were prepared from technical grade polyvinyl alcohol having a molecular weight of 15,000-18,000 and containing 2.2% acetyl groups and 36.4% hydroxyl groups. The reaction vessel was a glass cylinder, 6 cm high and 10 cm i.d. and equipped with a polyethylene film bottom. A 2% aqueous solution of polyvinyl alcohol was poured into the cylinder. After evaporation of the water, a colorless transparent film of alcohol formed on the surface of the polyethylene. Its thickness varied from 0.3 to 0.4 mm depending upon the amount of alcohol solution. Polyvinyl alcohol films were dried to constant weight. Sulfur sesquichloride freshly distilled

Card 1/3

L 13672-62

ACCESSION NR: AP3003525

over sulfur and dissolved in anhydrous toluene, was used in the reaction. Concentrations employed were: 1.0, 5.0, 10.0, 20.0, 50.0, 75.0, and 100 vol. %. Polyvinyl alcohol and sulfur sesquichloride were reacted by refluxing the films with a sulfur sesquichloride solution. Amount of sulfur sesquichloride used up depended upon the concentration of its solution and the reaction time. In all experiments, 1 gm of the polymer was reacted with 100 ml of sulfur sesquichloride solution for 10-120 minutes at a constant temperature ( $110^{\circ}$  C). Prior to the reaction, polymer films were subjected to additional drying at  $105^{\circ}$  C for 1 hour. After completion of the reaction, films were removed from the reaction flask and thoroughly washed with benzene to remove any adsorbed sulfur sesquichloride and free sulfur. The films were then dried for 6 hours in air and weighed. The amount of free sulfur in the samples did not exceed 0.4% of the original weight of polyvinyl alcohol. Films, heated in anhydrous toluene at  $110^{\circ}$  C for 10-120 minutes, served as controls. Samples of both the original and the reacted polyvinyl alcohol were analyzed for combined sulfur (chemical method), chlorine (Schift method), hydroxyl groups (Verley method) and for unsaturation (Knop method).

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L 13672-63

ACCESSION NR: AP3003525

thod). These samples were also subjected to infrared analysis with a double-beam IKS-14 spectrometer with a sodium chloride prism for 1800-650 cm<sup>-1</sup> range and a lithium fluoride prism for 3700-2700 cm<sup>-1</sup> range. Because of the variation in film thickness, spectral data are presented in terms of absorption coefficients calculated from the Bouger-Lambert law. The results indicate that a polyvinyl alcohol and sulfur sesquichloride reaction leads to the replacement of some of the hydroxyl groups by atoms of sulfur or chlorine which causes an increase in the molecular weight of the polymer. An increase in the amount of combined sulfur leads to a gradual increase in amorphism of polyvinyl alcohol. An increase in the concentration of sulfur sesquichloride and in the reaction time between the alcohol and the sesquichloride leads to a decrease in the number of hydroxyl groups and the appearance of O-S-O; O-C-Cl; O-S-Cl; C-S-Cl; and C-Cl linkages. Orig. art. has: 2 figures, 7 formulas, and 2 tables.

ASSOCIATION: Institut khimii polimerov AN UzSSR (Institute of Polymer Chemistry, AN "UzSSR")

SUBMITTED: 01Sep62

DATE ACQ: 23Jul63

ENCL: 00

SUB CODE: CH

NO. REF Sov: 011

OTHER: 000

Card 3/3

ACCESSION NR: AP4040479

S/0190/64/006/006/0997/1000

AUTHOR: Larin, P. P.; Musayev, U. N.; Tashpulatov, Yu. T.; Tillayev, R. S.; Usmanov, Kh. U.

TITLE: IR spectra of copolymers of acrylonitrile and 2-methylfuran

SOURCE: Vy'sokomolekulyarnye soyedineniya, v. 6, no. 6, 1964, 997-1000

TOPIC TAGS: copolymer, acrylonitrile, furan. 2-methyl, copolymer Ansil, radiation induced copolymerization, bulk copolymerization, solution copolymerization

ABSTRACT: The IR spectra of acrylonitrile--2-methylfuran (Amsil') copolymers have been studied. The copolymers were prepared by irradiating mixtures of the pure monomers both in bulk and in various solvents from a Co<sup>60</sup> source. The study has confirmed the formation of copolymers. From the results it was assumed that in radiation-induced copolymerization of acrylonitrile and 2-methylfuran in solution, solvent molecules add to the ends of the copolymer molecules and accelerate termination. This assumption was confirmed by the fact that "Amsil'" copolymers prepared in solution have a lower molecular weight than those bulk copolymerized.

Card 1/2

ACCESSION NR: AP4040479

The addition of the solvent is probably accompanied by a partial cyclization of polyacrylonitrile segments to form conjugated C=N bonds. Orig. art. has 2 figures.

ASSOCIATION: Institut khimii polimerov AN UzSSR (Institute of Polymer Chemistry, AN UzSSR); Tashkentskiy gosudarstvennyy universitet im. V. I. Lenina (Tashkent State University)

SUBMITTED: 25May63

ENCL: 00

SUB CODE: OC, GC

NO REF SOV: 003

OTHER: 001

Card 2/2

AZIZOV, M.A.; KATS, A.I.; LARIN, P.P.; TASHPUJATOV, Yu.T.; USMANOV, Kh.U.

Infrared absorption spectra of the complex compounds of copper  
of monopyridinecarboxylic acids and their derivatives. Uzb.khim.  
zhur. 8 no.5:47-53 '64. (MIRA 18:5)

1. Tashkentskiy farmatsevticheskiy institut i Nauchno-issledovatel'skiy institut khimii i tekhnologii khlopkovoy tsellyulozy Gosudarstvennogo komiteta khimicheskoy promyshlennosti pri Gosplane SSSR.

MELIKADZE, I.G.; LARIN, R.R.; BEZHANOV, F. Kh.; Prinimali uchast'ye:  
KHUROSHVILLI, G., inzh.; TSAGARELLI, T., inzh.; ZAMTARADZE, E., inzh.;  
BOGORISHVILI, G., tekhnik; MAYSURADZE, L., laborant; SHUBLADZE, G.,  
laborant; PANKRATOVA, Ye., kammeraz.

Investigation of teschenite disintegration by the thermal method.  
Soob.: AN Gruz. SSR 34 no.32633-640 Je '64 (MIRA 18:1)

1. Institut gornogo dela imeni G.A. TSulukidze AN Gruzinskoy SSR.  
Submitted November 25, 1963.

OSTROVSKIY, Yu.M.; LUKASHIK, N.K.; RAZUMOVICH, A.N.; BALAKLEYEVSKIY, A.I.;  
DOSTA, G.A.; TREBUKHINA, R.V.; LARIN, R.S.; KARPUT', S.N.;  
KOMAROVA, B.P.; NEPOCHELOVICH, N.S.; DVORYANINOVICH, L.N.;  
MOYSEYENOK, A.G.; MANDRIK, K.A.; GALITSKIY, E.A.; MATYSIK, M.S.;  
PODOBED, V.G.; MAKARINA-KIBAK, L.Ya.

Differentiation of specific and nonspecific metabolic shifts  
in an acute avitaminosis B<sub>1</sub> caused by oxythiamine. Vop.pit.  
24 no.4:41-48 Jl-Ag '65. (MIRA 18:12)

1. Kafedra biokhimii (zav. - dotsent Yu.M.Ostrovskiy)  
meditsinskogo instituta, Grodno. Submitted July 23, 1964.

LARIN, S.

ESR/Physics - Magnetization

21 Mar 53

"Investigation of Effect of All-Sided Compression on Saturation Magnetization of Iron at Temperature of Liquid Nitrogen," F. Gal'perin, S. Larin and A. Shishkov

DAN SSSR, Vol 89, No 3, pp 419-422

Find discrepancies of data in previous works (cf. H. Ebert, A. Kussman, Phys. Z., 38 (1937)); F. Gal'perin, DAN 78 (1951). Tabulate own experimental values and compare with others' results. Presented by A. F. Ioffe 21 Jan 53.

272F76

LARIN, S., mekhanik UNR-31

Hydraulic shears. Na stroy. Mosk. 1 no.2:25 P '58.  
(Cutting machines) (MIRA 11:9)

LARIN, S. A.

"Acclimatization of the Teleutka Squirrel in the Crimea," Sub. 24 Feb 47, Moscow  
Fur and Pelt Inst.

Dissertations presented for degrees<sup>†</sup> in science and engineering in Moscow in 1947.

SO: Sum. No. 457, 18 Apr 55

\* CAND. Biological Sci.

LARIN, S.A.

3599. LARIN, S.A. Uchet Chislennosti Okhotnich'ye-Promyslovых Zhivotnykh.  
M., Zagorizdat, 1954. 96s. s ill. 22sm 10,000ekz. 3r. 25k.-Bibliogr: s. 96-  
(54-57988) P 639.102+(616.3)

SO: Knizhnaya Letopis', Vol. 3, 1955

S/196/62/000/009/014/018  
E114/E184

AUTHOR: Larin, S.G.

TITLE: Use of rubber seals for the gates of the  
Volzhskaya gidroelektrostantsiya imeni V.I. Lenina  
(Volga Hydroelectric Station imeni V.I. Lenin)

PERIODICAL: Referativnyy zhurnal, Elektrotehnika i energetika,  
no.9, 1962, 11; abstract 9 D73. (Energ. str-vo. 22,  
M.-L., 1961, 66-69)

TEXT: The use of bulbous shaped rubber for sealing the  
gates gave satisfactory results at pressures up to 44.5 m head,  
but in certain cases such seals proved unsatisfactory, under  
actual working conditions. The horizontal attachment of bulbous  
shaped rubber with a flat rubber lining and a metallic cover  
plate proved the most successful. In the case of a horizontal  
seal between the sections of the gates, a sufficiently reliable  
seal can be made by welding an additional lengthened strip on  
the pressure side and by fixing the rubber with the cover plate.  
The overlap of the rubber for a detachable seal between the  
sections of the gates at a length of 10-12 m should be 10-12 mm.

Card 1/2

Use of rubber seals for the gates... S/196/62/000/009/014/018  
E114/E184

The rubber seals of the gates in vital positions in various installations should be checked by calculation as load bearing parts.

[Abstractor's note: Complete translation.]

Card 2/2

LARIN, S.G., inzh.

Use of rubber gate seals on the Volga Hydroelectric Power Station  
(Lenin). Energ. stroi. no.22:66-69 '61. (MIRA 15:7)

1. Stroitel'noye upravleniye Kuybyshevskoy gidroelektrostantsii.  
(Volga Hydroelectric Power Station (Lenin)--Gates, Hydraulic)

ALEKSEYEV, G.P.; ANDON'YEV, V.S.; ARNGOL'D, A.V.; BASKIN, S.M.;  
BASHMAKOV, N.A.; BEREZIN, V.D.; BERMAN, V.A.; BIYANOV, T.F.;  
GORBACHEV, V.N.; GRECHKO, I.A.; GRINBUKH, G.S.; GROMOV, M.F.;  
GUSEV, A.I.; DEMENT'YEV, N.S.; DMITRIYEV, V.P.; DUL'KIN, V.Ya.;  
ZVANSKIY, M.I.; ZENKEVICH, D.K.; IVANOV, B.V.; INYAKIN, A.Ya.;  
ISAYENKO, P.I.; KIPRIYANOV, I.A.; KITASHOV, I.S.; KOZHEVNIKOV,  
N.N.; KORMYAGIN, B.V.; KROKHIN, S.A.; KUDOYAROV, L.I.;  
KUDRYAVTSEV, G.N.; LARIN, S.G.; LEBEDEV, V.P.; LEVCHENKOV,  
P.N.; LEMZIKOV, A.K.; LIPGART, B.K.; LOPAREV, A.T.; MALYGIN,  
G.F.; MILOVIDOVA, S.A.; MIRONOV, P.I.; MIKHAYLOV, B.V., kand.  
tekhn. nauk; MUSTAFIN, Kh.Sh., kand. tekhn. nauk; NAZIMOV, A.D.;  
NEFEDOV, D.Ye.; NIKIFOROV, I.V.; NIKULIN, I.A.; OKOROCHKOV, V.P.;  
PAVLENKO, I.M.; PODROBINSKIY, G.M.; POLYAKOV, G.Ya.; PUTILIN, V.S.;  
RUDNIK, A.G.; RUMYANTSEV, Yu.S.; SAZONOV, N.N.; SAZONOV, N.F.;  
SAULIDI, I.P.; SDOBNIKOV, D.V.; SEMENOV, N.A.; SKRIPCHINSKIY, I.I.;  
SOKOLOV, N.F.; STEPANOV, P.P.; TARAKANOV, V.S.; TREGUBOV, A.I.;  
TRIGER, N.L.; TROITSKIY, A.D.; FOKIN, F.F.; TSAREV, B.F.; TSETSLIN,  
N.A.; CHUBOV, V.Ye., kand. tekhn. nauk; ENGEL', F.F.; YUROVSKIY,  
Ya.G.; YAKUBOVSKIY, B.Ya., prof.; YASTREBOV, M.P.; KAMZIN, I.V., prof.,  
glav. red.; MALYSHEV, N.A., zam. glav. red.; MEL'NIKOV, A.M., zam.  
glav. red.; RAZIN, N.V., zam. glav. red. i red. toma; VARPAKHOVICH,  
A.F., red.; PETROV, G.D., red.; SARKISOV, M.A., prof.; red.;  
SARUKHANOV, G.L., red.; SEVAST'YANOV, V.I., red.; SMIRNOV, K.I.,  
red.; GOTMAN, T.P., red.; BUL'DYAYEV, N.A., tekhn. red.

(Continued on next card)

ALEKSEYEV, G.P.---(continued). Card 2.

[Volga Hydroelectric Power Station; a technical report on the design and construction of the Volga Hydroelectric Power Station (Lenin), 1950-1958] Volzhskaya gidroelektrostantsiya; tekhnicheskii otchet o proektirovani i stroitel'stve Volzhskoi GES imeni V.I.Lenina, 1950-1958 gg. V dvukh tomakh. Moskva, Gosenergoizdat. Vol.2.[Organization and execution of construction and assembly work] Organizatsiya i proizvodstvo stroitel'nomontazhnykh rabot. Red. toma: N.V.Razin, A.V.Arngol'd, N.L. Triger. 1962. 591 p. (MIRA 16:2)

1. Deystvitel'nyy chlen Akademii stroitel'stva i arkhitektury SSSR (for Razin).  
(Volga Hydroelectric Power Station (Lenin)--Design and construction)

1. IVANENKO, D., KURDGELEV, D., LARIN, S.
  2. USSR (600)
  4. Mesotrons
  7. Comments on nonlinear meson dynamics. Dokl AN SSSR No 2 1953.
9. Monthly List of Russian Accessions, Library of Congress, April 1953, Uncl.

*LARIN, S.**3***USSR 1**

539.163.2

8592.  $\beta$ -disintegration of the nuclei of the type  $^{M^{14-}}_Z$ . D. IVANENKO AND S. LARIN. Lett' in *Zh. ekspер. teor. Fiz.*, 24, No. 3, 359-61 (1933). In Russian.

See Abstr. 4966 (1949). Compares the  $R$ - $Z$  curves obtained by 4 methods: (1)  $R = 1.5 \times 10^{-11} \times M^{\frac{1}{3}}$  cm; (2) from total cross-sections [see Abstr. 3029 (1951)]; (3) radii of "mirror" nuclei obtained from the energy of the  $\beta$ -disintegration and (4) from  $\alpha$ -disintegration. Kinks in the curves [particularly in (3) and (4)] coincide with some of the known critical numbers of nucleons ( $Z = 8, 14, 20, 28, 50, 82, 90$ ). The divergences between the curves are discussed.

*B. LACHMAN**PML L*

LARIN, S.

Metallurgical Abst.  
Vol. 21 May 1954  
Properties of Metals

Theory of the Periodic System of the Elements. V. N. Ivanenko and S. A. Larin (Doklady Akad. Nauk S.S.R., Chern.)  
1953, 88, (1), 45-47). [In Russian]. The Thomas-Fermi statistical method of calculating the at. numbers at which s-, p-, d-, or f-electrons should first appear, are outlined, and the departure from observation for f-electrons is noted. The equations are modified to account for exchange interactions of the electrons, and result in close agreement with observation. The results are discussed, and further effects of the exchange allowance are outlined. 8 ref. (Translated by the U.S. National Science Foundation (NSF-tr-2)).

—D. M. P.

11-11-54  
MPL

LARIN, S.

Mathematical Reviews  
Vol. 14 No. 8  
Sept. 1953  
Mathematical Physics.

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Ivannenko, D., Kurdgelaidze, D., and Larin, S. Remarks on  
nonlinear mesodynamics. Doklady Akad. Nauk SSSR  
(N.S.) 88, 245-247 (1953). (Russian)

In the equation  $\Delta\varphi - k^2\varphi - \Lambda\varphi = -4\pi g\rho$ , for the scalar meson function  $\varphi$ , the density  $\rho$  is replaced by its Thomas-Fermi approximation and the behaviour of the solution in the extreme relativistic and non-relativistic cases is briefly discussed.  
A. J. Coleman (Toronto, Ont.).

Larin, S.

USSR/Physics

Card 1/1

Authors : Larin, S.

Title : Anomalous diffusion of beta-rays and the hypothesis of conglomeration of elementary particles.

Periodical : Usp. Fiz. Nauk, 52, Ed. 2, 329 - 333, 1954

Abstract : Report presents various ideas on the anomaly of beta particles and the conglomeration of elementary particles. The anomalies of beta-particles were first discovered in 1934 by Skobel'tsin and Stepanova when arriving at a conclusion about the generation of positrons by beta-particles with size  $10^4$  times exceeding the theoretical value. The conglomeration hypothesis, which confirms that the latter takes place with a certain probability, particularly in conditions of multiple generation, is a development of the known De-Broglie theory, in which the equation of motion of certain particles is obtained as result of special "consolidation" of equations of motion of two spin particles. Thirteen references; 8 USSR since 1938; 5 English 1950.

Institution : .....

Submitted : .....

*Larin, S. I.*

USSR/Nuclear Physics - Transuranic

FD-1831

Card 1/1 Pub 146-16/25

Author : Larin, S. I., and Kolesnikov, N. N.

Title : Neutron sub-shell in the region of the transuranic elements

Periodical : Zhur. eksp. i teor. fiz. 28, 243, February 1955

Abstract : The authors remark that at the present time the existence of neutron or proton shells or sub-shells have not been established in the region of neutron numbers  $N$  greater than 126 and atomic numbers greater than 82. Only individual indications as to the possible existence of weak subshells have been made in the case of  $N=146$  (N. Kolesnikov, DAN SSSR, 97, 233, 1954) and  $Z=92$  (V. A. Kravtsov, DAN SSSR, 78, 43, 1951). They state that new data on the properties of the isotopes of the transuranic elements, including 99 and 100, permit one to discuss again this problem. Thirteen references.

Institution: Moscow State University

Submitted : September 30, 1954

Larin, S. I.

USSR/Nuclear Physics - Spontaneous fission

FD-1832

Card 1/1 Pub 146-17/25

Author : Kolesnikov, N. N., and Larin, S. I.

Title : Probability of spontaneous fission and beta-stability

Periodical : Zhur. eksp. i teor. fiz. 28, 244-245, February 1955

Abstract : The probability of nuclear fission depends upon the effective height of the potential barrier (i.e. upon the critical energy of fission), and also upon its width. Here the authors wish to call attention to the fact that the maximum stability relative spontaneous fission coincides sufficiently accurately with the maximum of beta-stability in isotopes of one and the same element, as shown e.g. from a consideration of the graph of the dependence of log tau (logarithm of probability of spontaneous fission) upon  $Z^2/A$ . They thank Prof. D. D. Ivanenko. Eight references, only 1 USSR (N. N. Kolesnikov, DAN SSSR, 97, 233, 1954).

Institution: Moscow State University

Submitted : September 30, 1954

Larin, S. I.

The distribution of the moment for the quantity of motion  
in the statistical model of the atom. S. I. Larin (Moscow  
State Univ.). *Zhur. Eksp. i Teor. Fiz.*, 23, 499-501  
(1953).—Math. The potential distribution  $L^{-2}$  as calcd. on  
the basis of the Thomson-Fermi model is compared with  
exptl. values. The agreement is good. J. R. L.

LARIN S.

USSR.

Model of the nucleus. D. D. Ivanenko, N. Kolesnikov,  
and S. Larin (M. V. Lomonosov State Univ., Moscow).  
*Doklady Akad. Nauk S.S.R.*, 109, 37-40 (1955).—The  
shell-structure of the nucleus is discussed in light of exptl.  
data on  $\beta$ -transitions, binding energies, etc. From the  
data, a model of the nucleus is proposed and a wave function  
is given for the model. J. Rovtar Leach.

②

LARIN, S. I.

Name: LARIN, S. I.

Dissertation: Distribution of the charge in nuclei and scattering of  
high-energy electrons

Degree: Cand Phys-Math Sci

*defended at*  
Affiliation: Moscow State U imeni M. V. Lomonosov  
*Publication*  
Defense Date, Place: 1956, Moscow

Source: Knizhnaya Letopis', No 51, 1956

Larin, S.I.

USSR/Nuclear Physics - Structure and Properties of Nuclei

C-4

Abst Journal : Referat Zhur - Fizika, No 12, 1956, 33976

Author : Larin, S. I.

Institution : Moscow State University, Moscow, USSR

Title : Distribution of Angular Momentum and Spatial Distribution of  
Nucleons in Nuclei

Original

Periodical : Zh. eksperim. i teor. fiziki, 1956, 30, No 3, 587-589

Abstract : From known values of the mean square of the orbital moment of  
momentum  $L^2$  it is possible, on the basis of the Thomas-Fermi  
statistical model, to draw certain conclusions concerning the  
character of the distribution of the nucleons in the nuclei.  
To obtain  $L^2$ , a refined scheme for filling the proton (neutron)  
levels in the nuclei was used. Within the framework of the  
statistical theory, relationships were established between the

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USSR/Nuclear Physics - Structure and Properties of Nuclei

C-4

Abst Journal : Referat Zhur - Fizika, No 12, 1956, 33976

parameters of the 2 types of proton (neutron) densities: (a) constant inside and exponentially diminishing on the boundary, (b) constant inside and diminishing at the boundary as the exponential divided by the square of the distance from the center of the nucleus. Depending on the number of protons (neutrons), the relative thickness of the surface layer (i.e., the ratio of the thickness of the surface layer to the radius of the constant portion) experiences sharp fluctuations, reaching minimum values at the magic nuclei. The curve is compared with a plot of the eccentricities of the nuclei resulting from the quadrupole moments. The Coulomb energies of the nuclei were used to determine the numerical values of the parameters. It is shown that the correct squares of the radii of the nuclei are obtained as a result. The values of the "effective" radii experience periodic fluctuations; their relative value diminishing at the magic nuclei.

Card 2/2

IVARENKO, D.D., red.; LARIN, S.I., red.; BELEVA, M.A., tekhn.red.

[Nonlinear quantum field theory; collection of articles]  
Nelineinaya kvantovaia teoriia polia; sbornik statei. Moskva,  
Izd-vo inostr.lit-ry, 1959. 464 p. (MIRA 13:2)  
(Quantum theory)

TEODOROVICH, E.V. [translator]; KHIMENKOV, Yu.V. [translator]; BRODSKIY,  
A.M., red.; LARIN, S.I., red.; POTAPENKOV, Ye.V., tekhn.red.

[New method in the theory of strong interactions; double  
dispersion representations] Novyi metod v teorii sil'nykh  
vzaimodeistvii; dvoinye dispersionnye predstavleniya. Stornik  
statei. Moskva, Izd-vo inostr.lit-ry, 1960. 358 p. Translated  
from the English. (MIRA 14:4)

(Nuclear reactions)

BELOV, D.V. [translator]; VAVILOV, B.T. [translator]; IVANENKO, D., red.;  
LARIN, S.I., red.; DOTSENKO, V.A., tekhn. red.

[Recent problems in gravitation] Noveishie problemy gravitatsii; sbornik  
statei. Moskva, Izd-vo inostr. lit-ry, 1961. 488 p. (MIRA 14:7)  
(Gravitation)

GOL'DER, G.A. [translator]; DUDAREV, V.Ya.[translator]; SOLOV'YEV,  
S.P.[translator]; ZHDANOV, G.S., red.; LARIN, S.I., red.;  
BELEVА, M.A., tekhn. red.

[Annihilation of positrons in solids] Annigiliatsiya po-  
zitronov v tverdykh telakh; sbornik statei. Moskva, Izd-vo  
inostr. lit-ry, 1960. 228 p. (MIRA 15:3)  
(Positrons)

SOKOLOV, Arseniy Aleksandrovich, prof.; LOSKUTOV, Yurii Mikhaylovich;  
TERNOV, Igor' Mikhaylovich; LARIN, S.I., red.; SMIRNOVA, M.I.,  
tekhn. red.

[Quantum mechanics] Kvantovaia mekhanika. Pod obshchei red. A.A.  
Sokolova. Moskva, Gos. uchebno-pedagog. izd-vo M-va prosv.  
RSFSR, 1962. 591 p. (MIRA 15:3)

(Quantum theory)

UILER, Dzh.A. [Wheeler, John A.]; MITSKEVICH, N.V. [translator];  
IVANENKO, D., red.; LARIN, S.I., red.; RYBKINA, V.P., tekhn.  
red.

[Gravitation, neutrinos, and the universe] Gravitatsiia, neitrino  
i Vselennia. Pod red. D.Ivanenko. Moskva, Izd-vo inostr. lit-  
ry, 1962. 403 p. Translated from the English. (MIRA 15:12)  
(Gravitation) (Neutrinos) (Cosmology)

BELEN'KIY, S.Z.[deceased]; VUL, B.M.; ZHARKOV, G.F.; ZHDANOV, G.B.;  
SILIN, V.P.; FAYNBERG, V.Ya.; FEYNBERG, Ye.L.; LARIN, S.I.,  
red.; UL'ANOVA, O.G., tekhn. red.

[From classical to quantum physics; fundamental representations in the theory of the constitution of matter] Ot klassicheskoi fiziki k kvantovoi; osnovnye predstavleniya ucheniiia o stroenii materii. Moskva, Izd-vo Akad. nauk SSSR, 1962. 69 p.  
(MIRA 16:3)

(Physics) (Quantum theory) (Matter--Constitution)

LARIN, S.M.

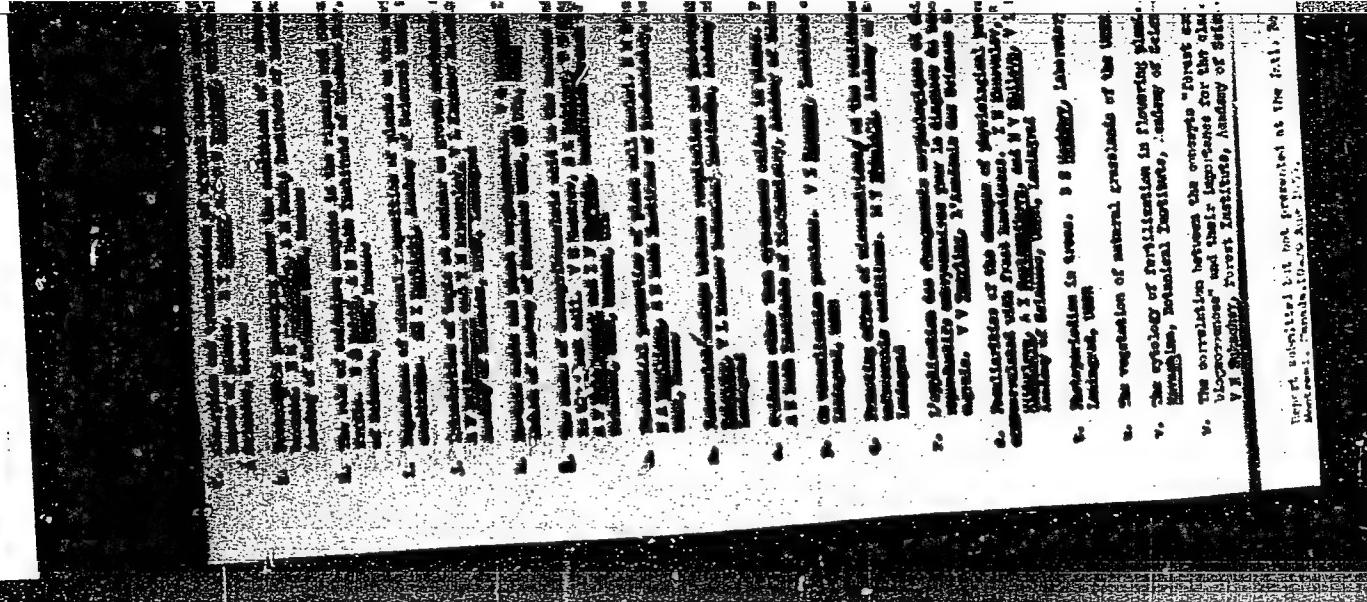
KUZNETSOV, Boris Grigor'evich, prof.; LARIN, S.M., red.; KADER, Ya.M.,  
red.izd-va; MIRONIKOVA, A.N., tekhn.red.

Dmitrii Ivanovich Mendeleev. Moskva, Voen.izd-vo M-va obor. SSSR,  
1957. 69 p.  
(Mendeleev, Dmitrii Ivanovich, 1834-1907)

STATSENKO, N.P.; LARIN, S.M.

"Travel" paranoiam. Trudy Gos.nauch.-issl.inst.psikh. 27:315-  
320 '61. (MIRA 15:10)

1. Omskiy meditsinskiy institut. Dir. - prof. I.S.Novitskiy.  
Kafedra psichiatrii. Zav. - dotsent Ya.L.Vikker.  
(PARANOIA)



Topics of interest will be presented as they fall.

Information from the following sources:

- v. Population dynamics of forest trees. V. P. Shchedry, Institute of Botany, USSR
- v. Correlation between the concepts "forest ecology" and their importance for the development of forest industry. V. P. Shchedry, Forest Institute, Academy of Sciences, USSR
- v. The ecology of fertilization in flowering plants. N. N. Kostyleva, Botanical Institute, Academy of Sciences, USSR
- v. The correlation between the concepts "forest ecology" and their importance for the development of forest industry. V. P. Shchedry, Forest Institute, Academy of Sciences, USSR

LARIN, T.V., doktor tekhn.nauk, prof.; DEVYATKIN, V.P., kand.tekhn.nauk;  
CHALYKH, Ye.I., kand.tekhn.nauk

New method of testing seamless rolled wheels on a ram impact machine.  
(MIRA 15:6)  
Vest.TSNII MPS 21 no.4:47-49 '62.  
(Wheels—Testing)

LARIN, T. V.

PA 2/49T93

USER/Metals  
Metals, Bearing  
Bearings, Surfaces

Mar 48

"Covering Steel Bearings of Friction Bearing  
by a Layer of Bronze," T. V. Larin, Cand Tech  
Sov., 2 pp

"Takk Zhel Dor" No 3

Bimetallic bearings have bronze alloy and last  
longer due to higher resistance of thin layer  
of bearing metal. Use of babbitt metal offers no  
difficulty, but application of bronze to steel  
surface is more complicated. Describes degreasing,  
hot plating, and pouring of bronze in detail.  
2/49T93

USER/Metals (Contd)

Mar 48

Includes microphotographs.

2/49T93

LARIN, T.V.

KISLIK, V.A., kandidat tekhnicheskikh nauk; LARIN, T.V., kandidat tekhnicheskikh nauk

Wear on locomotive wheelbands by shaped brake shoes. Tekh.zhel.  
dor.7 no.6:26-27 Je'48. (MIRA 8:11)  
(Wheels)

IARIN, T.V.; DEVYATKIN, V.P.; MALOZEMOV, N.A.; GOL'DENTUL, B.A. redaktor,  
VETINA, G.P. tekhnicheskij redaktor.

[Increasing the wear resistance of locomotive parts] Povyshenie  
iznosostoikosti parovoznykh detalei. Moskva, Gos. transp. zhel-  
dor. izd-vo, 1955. 191 p. (Moscow. Vsesoiuznyi nauchno-issledo-  
vatel'skii institut zhelezodorozhного transporta. Trudy, no.103)  
(Locomotives) (Mechanical wear)

LARIN, T.V.; DEVYATKIN, V.P.; KRIVOSHEYEV, V.N.; NAUMOV, I.V.;  
CHALYKH, Ye.I.; SELIKHOVA, T.A., inzhener, redaktor;  
KHITROV, P.A., tekhnicheskiy redaktor.

[Seamless rolled wheels for railroad cars] Tsel'nokatannye  
zheleznodorozhnye kolessa. Moskva, Gos.trans. zhel-dor.izd-vo.  
1956. 187 p. (Moscow. Vsesoiuznyi nauchno-issledovatel'skii  
institut zheleznodorozhnogo transporta. Trudy, no.124).

(MLRA 9:11)

(Wheels)

SOV/137-57-1-1384

Translation from: Referativnyy zhurnal. Metallurgiya, 1957, Nr 1, p 183 (USSR)

AUTHORS: Larin, T. V., Devyatkin, V. P.

TITLE: On the Mechanism of the Wear of Railroad-car Wheels (O mekhanizme iznosa zheleznodorozhnykh koles)

PERIODICAL: Treniye i iznos v mashinakh. Nr 11. Moscow, AN SSSR, 1956, pp 238-263

ABSTRACT: The authors investigated the structural changes in the surface layer of working railroad-car wheel tires (T) and the effect of the C content (0.45, 0.55, 0.60, 0.68, and 0.86) on the structural changes in the surface layer of the specimens when they were subjected to friction tests. The steel of a worn T containing 0.73% C and 0.76% Mn has a  $\sigma_b$  of 90 kg/mm<sup>2</sup>. Etching with 4% HNO<sub>3</sub> of samples cut out of various zones of the surface layers of worn T showed white, etch-resistant layers composed of structurefree martensite. The formation of such white layers causes a rapid wear of T. The mechanism of T wear consists of the separation from the rolling surface of particles of plastically deformed metal and of the white layer, which latter appeared as a result of structural

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SOV/137-57-1-1384

On the Mechanism of the Wear of Railroad-car Wheels

transformation caused by friction heat at points of skidding contact. The rate of development of these processes is explained by insufficient resistance of the metal to plastic deformation, hardenability of the T metal, the occurrence of skidding, the skidding velocity, and the magnitude of the specific pressures over the contact surface. In order to increase wear resistance of T it is necessary to produce a stronger layer, which would resist breaking down for the longest possible time, for which purpose the authors recommend use of steels with the lowest possible C content ( $< 0.6\%$ ) and with alloying additives which increase the strength but do not increase hardenability. The  $\sigma_b$  should be  $95 \text{ kg/mm}^2$ . The study of structural transformations in the surface layer of laboratory specimens of steels with various C content, friction-tested on a special apparatus, showed that the nature and properties of T structure in the region of hardened layer are the same as on the surface of the specimens.

A. M.

Card 2/2

LARIN, T.V., kandidat tekhnicheskikh nauk.

Steel wear in relation to hardness and carbon content.  
Vest. TSNII MPS 15 no.4:26-29 D '56. (MLRA 10:2)

(Steel--Testing) (Mechanical wear)

LARIN, Stepan Mikhaylovich; ASTASHKOVICH, Boris Mikhaylovich; KUPTSOV, I.I.,  
inzhener, redaktor; KHITROV, P.A., tekhnicheskiy redaktor.

[Increasing the wear resistance of bushings and piston rings for  
locomotive diesel engines.] Povyshenie iznosostoikosti vtulok i  
porshchnevyykh kolets teplovoznykh diselей. Moskva, Gos.transp.  
zhelezdor.izd-vo, 1957. 122 p. (Moscow, Vseschiuznyi nauchno-  
issledovatel'skii institut zheleznodorozhного transporta. Trudy,  
no. 140). (MLRA 10:7)

(Piston rings) (Diesel engines)

SOV/137-58-7-15764

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 7, p 266 (USSR)

AUTHOR: Larin, T. V.

TITLE: Metal for Locomotive Tires (Metall dlya lokomotivnykh bandazhey)

PERIODICAL: Vestn. Vses. n.-i. in-ta zh.-d. transp., 1957, Nr 5, pp 42-46

ABSTRACT: An investigation of the effect of the chemical composition on the wear of tires during their contact with rails and brake-shoes was carried out. On a special mounting burns of steel plates containing 0.35-0.84% C were reproduced after those observed on the tires. It was determined that the martensite layer forming due to this was destroyed less frequently when C content was up to 0.6%. Laboratory wear tests showed that with an increase in hardness the wear resistance of steel with both a low and a high C content increases while among steels of equal hardness those with a lower C content have a greater wear resistance. Comparative testing under working conditions of experimental tires of Cr-Mn-steel with high and low C contents and also of ordinary carbon-steel tires showed a negligible difference in the wear of either type. The wear of high-carbon and ordinary tires proved the same, while that of low carbon was less. A considerable

Card 1/2